# CLONING HUMAN BEINGS

Report and Recommendations of the National Bioethics Advisory Commission

Rockville, Maryland June 1997

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June 9, 1997

The President The White House Washington, D.C. 20500

Dear Mr. President:

On February 24, 1997, in the wake of the announcement that scientists in Scotland apparently had succeeded in cloning an adult sheep, you asked the National Bioethics Advisory Commission to review the legal and ethical issues associated with the use of this technology and to report back within ninety days with recommendations. A week later you instructed the heads of executive departments and agencies that "no federal funds shall be allocated for cloning of human beings" thereby ensuring that precipitous steps would not be taken while the Commission was studying the subject.

In this short interval, we have made every effort to consult with ethicists, theologians, scientists, physicians, and other citizens with interests and concerns in this area. Moreover, we have invited inputs for the Commission's consideration from as broad a cross-section of the community as time allowed. Further, recognizing that science and medicine are international activities with outstanding investigators and facilities in many nations, we have attempted to review relevant policies and proposals with respect to human cloning in other countries. However, we do not view it as essential to follow others in this area unless we find their proposals compelling, since we have different political and cultural traditions.

In this report, we address a very specific aspect of cloning namely where genetic material would be transferred from the nucleus of a somatic cell of an existing human being to an enucleated human egg with the intention of creating a child. We do not revisit either the question of the cloning of humans by embryo-splitting or the issues surrounding embryo research. The latter issue has, of course, recently received careful attention by a National Institutes of Health panel, the Administration, and Congress.

Not surprisingly, we have discovered that the potential ability to clone human beings through the somatic cell nuclear transfer techniques raises a whole host of complex and difficult scientific, religious, legal and ethical issues--both new and old. Indeed, the Commission itself is unable to agree at this time on all the ethical issues that surround the issue of cloning human beings in this manner. It seems clear to all of us, however, given the current stage of science in this area, that any attempt to clone human beings via somatic cell nuclear transfer techniques is uncertain in its prospects, is unacceptably dangerous to the fetus and, therefore, morally unacceptable. At present, moral consensus on this issue should be easily achieved. Furthermore, the continuing

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controversy over the social and ethical issues raised by this new development require more time for deliberation and the accumulation of new scientific data. We therefore recommend that the current moratorium on attempts to create children in this manner be continued and that you immediately ask for voluntary compliance in the private sector while federal legislation banning the use of these techniques for creating children is formulated and considered.

While we have been able to agree on this and certain other recommended actions, we feel quite strongly that most of the legal and moral issues raised can only be resolved, even temporarily, by a great deal more widespread deliberation and education. This type of national discussion is especially necessary in our democratic and pluralistic society for the following reasons: there is no universally accepted ethical theory; Americans hold various religious and moral perspectives on these issues; conflicting values are at stake; Americans differ on the importance and meaning of particular traditions; tolerance (agreeing to disagree) governs wide areas of our national life; and given our historical traditions, we are strongly inclined to leave to the individual conscience those acts that do not harm others and on which there is no moral consensus.

As a result, we must continue to build our understanding of the widespread public concern that has been generated by these recent developments. Some of this concern can be explained by an inadequate understanding of the issues--sometimes even confusing science and science fiction. This matter, however, can be addressed over time through further public education. Other concerns, however, run much deeper and range from the implications for particular faith commitments, to views regarding the appropriate sphere for human action, to concerns regarding the future of the family, to cumulative apprehensions about the real net benefit of a rapidly advancing technology that some believe is too aggressively pushing aside important social and moral values. As we move ahead to the next stage of our national discussion, these are among the many issues that need to be thoughtfully addressed.

Finally, while our specific recommendations include continuing the moratorium you announced in February of this year, and a call for a specific federal legislation, the report also includes important sections outlining the scientific, religious, ethical and legal issues that are raised by these new scientific developments. It is our hope that these materials, by clarifying certain issues and highlighting others, will form a useful initial basis for the ongoing deliberations and educational dialogues that we believe are so essential. We have been impressed by the difficulties caused by the lack of knowledge about genetics and the science involved in cloning revealed in the public and media responses to the cloning of Dolly the sheep. We believe, therefore, that the federal government should continue to actively encourage public education in this area of science so that as public deliberation takes place it is as informed as possible.

I would like to take this opportunity to thank all the Commissioners and our very dedicated staff for the intensity and depth of their commitment to the task that you assigned to us.

Sincerely,

Harold T. Shapiro THE WHITE HOUSE

#### WASHINGTON

February 24, 1997

Dr. Harold Shapiro
Chair
National Bioethics
Advisory Commission
Suite 3C01
6100 Executive Boulevard
Bethesda, Maryland 20892-7508

Dear Dr. Shapiro:

As you know, it was reported today that researchers have developed techniques to clone sheep. This represents a remarkable scientific discovery, but one that raises important questions. While this technological advance could offer potential benefits in such areas as medical research and agriculture, it also raises serious ethical questions, particularly with respect to the possible use of this technology to clone human embryos.

Therefore, I request that the National Bioethics Advisory Commission undertake a thorough review of the legal and ethical issues associated with the use of this technology, and report back to me within ninety days with recommendations on possible federal actions to prevent its abuse.

Sincerely,

Bill Clinton

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